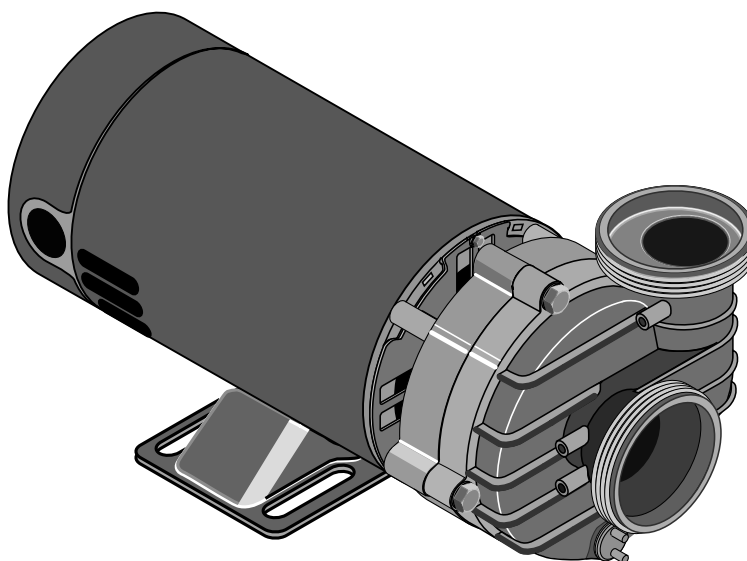


STA-RITE®

DURA-JET™ SPA PUMP

O W N E R ' S M A N U A L



INSTALLATION, OPERATION & PARTS

This manual should be furnished to the end user of this pump; its use will reduce service calls, chance of injury, and will lengthen pump life.

CUSTOMER SUPPORT: CALL (800) 831- 7133

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• (919) 566-8000 • 10951 West Los Angeles Ave., Moorpark, CA 93021 • (805) 553-5000

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P/N S377 (Rev A) - 04/14/08

DURA-JET SPA PUMP

To avoid unneeded service calls, prevent possible injuries, and get the most out of your pump, READ THIS MANUAL CAREFULLY!

The Sta-Rite 'DJ' Series Spa Pump:

- Is designed to circulate hot water in spas and hot tubs.
- Is an excellent performer; durable, reliable.

IMPORTANT SAFETY INSTRUCTIONS

Always follow basic safety precautions with this equipment, including the following.

⚠ WARNING To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

⚠ CAUTION This pump is for use with permanently installed pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity.

SAVE THESE INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS!

⚠ This is the safety alert symbol. When you see this symbol on your system or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

⚠ DANGER warns about hazards that will cause death, serious personal injury, or major property damage if ignored.

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⚠ WARNING warns about hazards that can cause death, serious personal injury, or major property damage if ignored.

⚠ CAUTION warns about hazards that will or can cause minor personal injury or property damage if ignored.

NOTICE indicates special instructions not related to hazards.

Carefully read and follow all safety instructions in this manual and on equipment. Keep safety labels in good condition; replace if missing or damaged.

⚠ WARNING Incorrectly installed or tested equipment may fail, causing severe injury or property damage.

Read and follow instructions in owner's manual when installing and operating equipment. Have a trained pool professional perform all pressure tests.

1. Do not connect system to a high pressure or city water system.
2. Use equipment only in a pool or spa installation.
3. Trapped air in system can cause explosion. BE SURE all air is out of system before operating or testing equipment.

Before pressure testing, make the following safety checks:

- Check all clamps, bolts, lids, and system accessories before testing.
- Release all air in system before testing.
- Water pressure for test must be less than 25 PSI (172 kPa).
- Water Temperature for test must be less than 100° F (38° C).
- Limit test to 24 hours. After test, visually check system to be sure it is ready for operation. Remove trap lid and retighten hand tight only.

NOTICE: These parameters apply to Sta-Rite equipment only. For non-Sta-Rite equipment, consult manufacturer.

INSTALLATION

Installation and wiring of pump should only be done by qualified, licensed personnel.

Pump mount must:

Be Solid - Level - Rigid - Vibration free. (To reduce vibration and pipe stress, bolt pump to mount.)

Be installed with pump suction inlet below water level at all times (this allows pump to prime).

Be installed with pump discharge below water level at all times (to avoid trapped air in discharge line).

Allow discharge line to be level or slope slightly up to heater, spa, or pool.

Have adequate drainage to prevent flooding.

Be protected from excess moisture.

Allow adequate access for servicing pump and piping.

Ventilation:

Provide adequate ventilation to prevent motor overheating.

For continuous running, motor hot air exhaust must be able to escape motor compartment.

Piping:

Use flexible or rigid PVC pipe for connections to pump.

Suction/discharge piping gate valves will allow removal for servicing.

Use at least 1-1/2" IPS pipe.

Fittings restrict flow; for best efficiency use fewest possible fittings.

Pump will not prime if suction pipe leaks.

Unions are sold separately. Use as follows for leak-free connections to pump:

1. 'O' Ring and sealing surfaces must be clean.
2. Assemble handtight only! (NO WRENCHES!)
3. NO pipe compound or Teflon tape on unions.
4. Bond pipe to unions with PVC cement.

▲ WARNING Use PVC cement only in a well ventilated area away from flame; FOLLOW MANUFACTURER'S INSTRUCTIONS!

Spa Fittings:

Size and number of jets will have a major effect on jet action.

Typical installations use up to four 7/8" or 3/4" diameter jets or up to seven 1/2" diameter jets.

Spa fittings must meet International Association of Plumbing and Mechanical Officials (IAPMO) standards. Use only non-entrapping suction fittings or double suction.

ELECTRICAL

▲ WARNING Hazardous voltage. Can shock, burn, or cause death. Ground motor before connecting to power supply.

▲ Ground motor before connecting to electrical power supply! Failure to ground pump motor can cause serious or fatal electrical shock hazard!

▲ Do not ground to a gas supply line!

▲ To avoid dangerous or fatal electrical shock, turn OFF power to motor before working on electrical connections.

▲ GFCI tripping indicates an electrical problem. If GFCI trips and will not reset, have a qualified electrician inspect and repair electrical system.

▲ Exactly match supply voltage to nameplate voltage (115 Volt or 230 Volt single phase only)! Incorrect voltage can cause fire or seriously damage motor and voids warranty!

Grounding:

Install, ground, and wire motor according to local or National Electrical Code requirements.

Permanently ground motor; use size and type wire required by code.

Ground connection must be made to green grounding terminal under motor canopy or access plate.

Connect motor ground terminal to electrical service ground.

Install and bond pump according to local codes and ordinances; use bonding lug on motor (see Figure 1). Use solid copper conductor No. 8 AWG (8.4mm²) or larger.

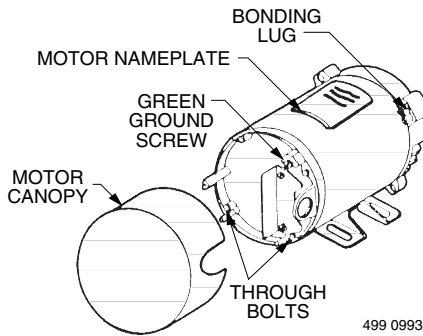


Figure 1: Typical ground screw and bonding lug locations.

Wiring:

See the wiring diagram on the motor housing for wiring connection information. Pump must be permanently connected to circuit. Tables IA and IB, Pages 6 and 7, give correct wire and circuit breaker sizes for the pump alone. If other lights or appliances are also on the same circuit, be sure to add their amp loads to pump amp load before figuring wire and circuit breaker sizes. (If unsure how to do this or if this is confusing, consult a licensed electrician.) Use the load circuit breaker as the master on-off switch.

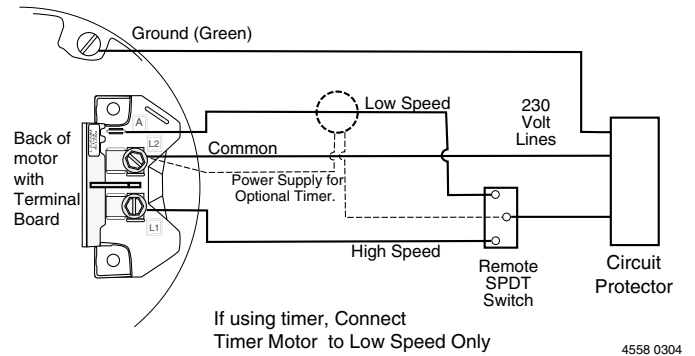
Install a Ground Fault Circuit Interrupter (GFCI) in circuit; it will sense a short-circuit to ground and disconnect power before it becomes dangerous to pool users. For size of GFCI required and test procedures for GFCI, see manufacturer's instruction.

In case of power outage, check GFCI for tripping (which will prevent normal pump operation). Reset if necessary.

NOTICE: If you do not use conduit when wiring motor, be sure to seal wire opening on end of motor to prevent dirt, bugs, etc., from entering.

To Wire a Two-Speed Motor:

Wire the pump as shown in the diagram.



Minimum switch and timer amp rating must equal Branch Fuse Rating given in "Recommended Fusing and Wiring Data" table.

Figure 2: Remote switch for 2-Speed pumps (-0001, -0002, -0003, -0004 models)

Voltage:

Voltage at motor must be not more than 10% above or below motor nameplate rated voltage or motor may overheat, causing overload tripping and reduced component life. If voltage is less than 90% or more than 110% of rated voltage when motor is running at full load, consult power company.



Values given in tables on Pages 6 and 7 are for **PUMP MOTOR ONLY**. If additional spa accessories are installed on pump motor circuit (heater, blower, etc.), include their amperage draw when figuring wire and circuit breaker sizes.

TABLE IA – RECOMMENDED CIRCUIT BREAKER SIZE AND WIRING DATA

Model No.	Voltage/ Hertz (1 Phase)	Full Load Amps	Branch Circuit Breaker Amp Rating	AWG (mm ²) Wire Gauge Size at 90° C		
				Dist in Ft. (M) - Service to Motor		
				0-100 (0-30)	101-200 (31-60)	201-300 (61-90)
Single Speed Pumps:						
5DJAFB-0001, -0101	230/50	5.6	15	14 (2)	14 (2)	12 (3)
5DJAEB-0001, -0101	230 / 50	5.5	15	14 (2)	10 (5.5)	8 (8.4)
5DJAGB-0003, -0103	230 / 50	8.7	15	14 (2)	14 (2)	12 (3)
DJAEA-0001	115 / 60	12	15	14 (2)	10 (5.5)	8 (8.4)
DJAEA-0007	115 / 60	12	15	14 (2)	10 (5.5)	8 (8.4)
DJAAGB-0001	230 / 60	11.1	15	14 (2)	14 (2)	12 (3)
DJAAGB-0005	230 / 60	12.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAAGB-0007	230 / 60	12	15	14 (2)	10 (5.5)	8 (8.4)
DJAAGB-0051, -0151	230 / 60	11.1	15	14 (2)	14 (2)	12 (3)
DJAAGB-0091	230 / 60	11.1	15	14 (2)	14 (2)	12 (3)
DJAEB-0001	230 / 60	6.2 / 1.7	15	14 (2)	14 (2)	14 (2)
DJAGB-0001	230 / 60	10.6	15	14 (2)	14 (2)	12 (3)
DJAGB-0021H, -0121H	230 / 60	10.6	15	14 (2)	14 (2)	12 (3)
DJAGB-0073, -0173, -3073, -3173	230 / 60	8.6	15	14 (2)	14 (2)	12 (3)
DJAGB-3173	230 / 60	8.6	15	14 (2)	14 (2)	12 (3)
DJAGB-0091, -0191	230 / 60	10.6	15	14 (2)	14 (2)	12 (3)
DJAGB-9051M	230 / 60	10.6	15	14 (2)	14 (2)	12 (3)
DJAGB-9055M, -9155M	230 / 60	9	15	14 (2)	14 (2)	12 (3)
DJAGB-9071M	230 / 60	10.6	15	14 (2)	14 (2)	12 (3)
DJAGB-9073, -9173	230 / 60	8.6	15	14 (2)	14 (2)	12 (3)
DJAHB-0007	230 / 60	12	15	14 (2)	14 (2)	12 (3)
DJAHB-0021H, -0121H	230 / 60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAHB-0041, -0141, -3141	230 / 60	12	15	14 (2)	14 (2)	12 (3)
DJAHB-0151	230 / 60	12	15	14 (2)	14 (2)	12 (3)
DJAHB-0055M, -0155M	230 / 60	12	15	14 (2)	14 (2)	12 (3)
DJAHB-0097	230 / 60	12	15	14 (2)	14 (2)	12 (3)
DJAFA-0001	115/60	16	25	12 (3)	8 (4)	6 (14)
DJAFB-0002	115/230 /60	16.4 / 8.2	25 / 15	12 (3)	8 (4)	6 (14)
DJAFB-0051M, -0151M	115/230 /60	16.4 / 8.2	25 / 15	12 (3)	8 (4)	6 (14)
DJAFB-0052, -0072, -0172	115/230 /60	16.4 / 8.2	25 / 15	12 (3)	8 (4)	6 (14)
DJAFB-0097	115/230 /60	16 / 8	25 / 15	12 (3)	8 (4)	6 (14)
DJAFB-3103D	115/230 /60	16.4 / 8.2	25 / 15	12 (3)	8 (4)	6 (14)
DJAGC-0007	115/230 /60	20 / 10	25 / 15	10/14 (5.5/2)	8/14 (8.4/2)	6/12 (14/3)
Two-Speed Pumps:						
5DJAYEB-0001, -0101	230/50	5.7 / 1.6	15	14 (2)	14 (2)	14 (2)
5DJAYFB-0097, 3007, -3097	230/50	8.2 / 2.6	15	14 (2)	14 (2)	12 (3)
DJAYEA-0001, -0002	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYEA-0007	115 /60	11 / 2.9	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0052, -0152	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0061	115 /60	12 / 3.3	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0062, -0162, -3062	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0062A, -0162A	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0082, -0182	115 /60	11 / 2.9	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0112	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-0142A	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3022	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3052, -3152	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3052M, -3152M	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3097, -3197	115 /60	11 / 2.9	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3113	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-3142B	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYEA-9103	115 /60	10.4 / 3.6	15	14 (2)	10 (5.5)	8 (8.4)
DJAYFA-0001	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0007	115 /60	13.8 / 3.8	20	12 (3)	10 (5.5)	8 (8.4)

NOTE: The second character of the model number suffix (the four characters following the dash) on pumps packed in bulk will be a "1" (for example, – 3115). Identical pumps packed individually will have a suffix with a "0" replacing the "1" (for example – 3015). When replacing a pump having a suffix "-X1XX", order the same model with suffix "-X0XX". When replacing a pump having a suffix "-X0XX", do not change the suffix.

TABLE IA (Continued)– RECOMMENDED CIRCUIT BREAKER SIZE AND WIRING DATA

Model No.	Voltage/ Hertz (1 Phase)	Full Load Amps	Branch Circuit Breaker Amp Rating	AWG (mm ²) Wire Gauge Size at 90° C		
				Dist in Ft. (M) - Service to Motor		
				0-100 (0-30)	101-200 (31-60)	201-300 (61-90)
Two-Speed Pumps:						
DJAYFA-0042B, -0142B	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0151M	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0052, -0152	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0062, -0162,	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-3062, -3162	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0062A, -0162A	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-0082, -0182	115 /60	13.8 / 3.8	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-3022, -3122	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-3022H, -3122H	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-3097, -3197	115 /60	13.8 / 3.8	20	12 (3)	10 (5.5)	8 (8.4)
DJAYFA-9022, -9122	115 /60	13 / 3.7	20	12 (3)	10 (5.5)	8 (8.4)
DJAAYGB-0001	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0002	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0003	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0005	230 /60	11.5 / 3.4	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0007	230 /60	12 / 3.5	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0051, -0151, -3051, -3151	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0051M, -0151M	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0061, -0161	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-0063, -0163	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3013, -3113	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3015	230 /60	11.5 / 3.4	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3021, -3121	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3053, -3153	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3061, -3161	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3092	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-3097	230 /60	12 / 3.5	15	14 (2)	14 (2)	12 (3)
DJAAYGB-9013, -9113	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAAYGB-9051M	230 /60	10.7 / 3.0	15	14 (2)	14 (2)	12 (3)
DJAYFB-0001	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-0002	230 /60	8.6 / 2.1	15	14 (2)	14 (2)	12 (3)
DJAYFB-0013, -0113	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-0051M, -0151M	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-0061, -0161	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-3013, -3113, -9013, -9113	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-3093	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYFB-9003D, -9103D	230 /60	7.2 / 2.4	15	14 (2)	14 (2)	14 (2)
DJAYGB-0001	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0002	230 /60	11.2 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0003	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0013, -0113, -3013, -3113	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0042B, -0142B	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0051, -0151	230 /60	11.2 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0052, -0152	230 / 60	11.2 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0055, -0155	230 / 60	8.9 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0055A, -0155A	230 / 60	8.9 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0061, -0161	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0073, -0173, -3173, -9173	230 / 60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3061, -3161	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0112	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-0151M	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3021, -3121	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3021H, -3121H	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3051MB, -3151MB	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3055MB, -3155MB	230 /60	8.9 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3071MB, -3171MB	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3092, -3192	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-3162	230 /60	11.2 / 3	15	14 (2)	14 (2)	12 (3)

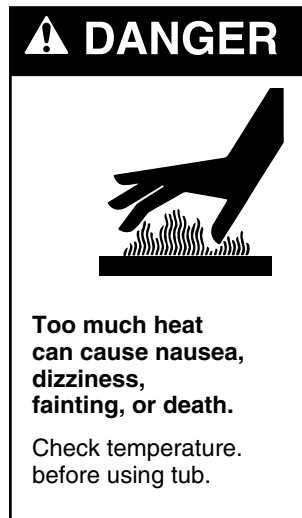
NOTE: The second character of the model number suffix (the four characters following the dash) on pumps packed in bulk will be a "1" (for example, – 3115). Identical pumps packed individually will have a suffix with a "0" replacing the "1" (for example – 3015). When replacing a pump having a suffix "-X1XX", order the same model with suffix "-X0XX". When replacing a pump having a suffix "-X0XX", do not change the suffix.

TABLE IA (Continued)– RECOMMENDED CIRCUIT BREAKER SIZE AND WIRING DATA

Model No.	Voltage/ Hertz (1 Phase)	Full Load Amps	Branch Circuit Breaker Amp Rating	AWG (mm ²) Wire Gauge Size at 90° C		
				Dist in Ft. (M) - Service to Motor		
				0-100 (0-30)	101-200 (31-60)	201-300 (61-90)
Two-Speed Pumps:						
DJAYGB-9013, -9113	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-9051M, -9151M	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYGB-9051MB, -9151MB	230 /60	8.5 / 3	15	14 (2)	14 (2)	12 (3)
DJAYHB-0001	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-0041, -0141	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-0051M, -0151M	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-0055M, -0155M	230 /60	12 / 4.4	15	14 (2)	14 (2)	12 (3)
DJAYHB-0061, -0161	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-0071M	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-0097	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-3021, -3121	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-3021H, -3121H	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)
DJAYHB-9041, -9141	230 /60	12 / 3.7	15	14 (2)	14 (2)	12 (3)

NOTE: The second character of the model number suffix (the four characters following the dash) on pumps packed in bulk will be a "1" (for example, – 3115). Identical pumps packed individually will have a suffix with a "0" replacing the "1" (for example – 3015). When replacing a pump having a suffix "-X1XX", order the same model with suffix "-X0XX". When replacing a pump having a suffix "-X0XX", do not change the suffix.

OPERATION



Priming Pump:

CAUTION NEVER run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor.

! Do not add chemicals to spa system directly in front of pump suction. Adding undiluted chemicals may damage pump and voids warranty.

Open gate valves before starting system.

Pump will prime itself when used in flooded suction system.

Be sure to release all air from filter and piping system; see spa/filter owner's manual.

On two speed models, low speed is used for filtration and heating; high speed provides therapy jet action.

! Do not block pump suction! To do so with body may cause severe or fatal injury. Small children using spa must ALWAYS have close adult supervision!

- Tub should have dual suction outlets to prevent body or hair entrapment.
- Use only tub suction fittings certified to meet ASME/ANSI standard A112.19.8M-1987.

NOTICE: Do not block jets! To do so may flood area causing damage to equipment and water damage to surrounding area.

Water:

Keep water level at least two inches above bottom of skimmer opening when system is not in use. Failure to do so can allow air to enter system, causing pump to lose its prime.

Keep water temperature at 104°F (40°C) or below.

Keep an accurate thermometer in spa; check it before getting in.

Age or health conditions may require a lower temperature; consult a physician for more information.

If in doubt, start at a lower temperature and gradually increase it according to your experience, but do not increase it above 104°F.

! Do not use or allow the use of the tub by anyone using alcohol or drugs. The effects of hot water, alcohol and/or drugs can cause dizziness and falling, loss of consciousness, or heart attack.

! A long bath in hot water may cause hyperthermia (too much heat in the body) which can be fatal.

Some symptoms of hyperthermia are:

- Nausea
- Dizziness
- Fainting

If these symptoms appear while in the spa, GET OUT AT ONCE!

Cool the body at once with cold towels or a cool shower. Call a doctor if symptoms do not go away.

PUMP SERVICE

⚠ WARNING Hazardous voltage. Can shock, burn, or cause death. Disconnect power before working on pump or motor.

Pump should only be serviced by qualified personnel.

⚠ To avoid dangerous or fatal electrical shock hazard, disconnect power to motor before working on pump or motor!

No lubrication or regular maintenance are needed.

If shaft seal is damaged, repair as follows:

Removing Old Seal:

1. Disconnect power to pump motor.
2. Drain tub and pump; disconnect unions to allow access to pump.
3. Remove four bolts holding front plate to seal plate; remove front plate.
4. Remove shaft cover or motor canopy; using screwdriver in slot on motor end of shaft or wrench on flats of shaft extension, hold pump shaft and unscrew impeller from shaft (turn counterclockwise). Rotating half of seal will come off with impeller.
5. Carefully remove rotating part of seal from impeller sleeve by pulling and turning on sealing washer and spring (Figure 3). Do not damage impeller surface where drive ring seats and seals.



Figure 3

6. Carefully remove four motor throughbolts from seal plate (Figure 4); remove seal plate and use a screwdriver to tap ceramic seat out from the rear (Figure 5). Do not damage seal cavity in seal plate.



Figure 4



Figure 5

7. Clean cavity from which seal was removed and clean motor shaft.
8. Inspect water slinger for damage. Replace if needed.

Installing New Seal:

1. Ceramic seat must be clean and free of dirt, grease, dust, etc. Wet rubber cup gasket of ceramic seat with small amount of water; press into cavity firmly and squarely with finger pressure (Figure 6).



Figure 6

2. If ceramic seat will not locate properly, remove it, place face up on bench, and reclean cavity. Ceramic seat should now locate.
3. Seal must be free of dirt, grease, grit, scratches or chips; be sure impeller sleeve is clean. Slide seal assembly, rubber drive ring first, onto impeller sleeve until drive ring bottoms on impeller back shroud.
4. Slip water slinger over motor shaft; remount seal plate. Torque throughbolts to 25 inch-lbs. (29 cm-kg).
5. Screw impeller onto motor shaft until it seats against motor shaft shoulder. Work water slinger over end of impeller sleeve so it rides on sleeve (Figure 7).



Figure 7

6. Remount front plate to seal plate.
7. Reconnect unions; tighten hand tight only.

STORAGE/WINTERIZING

⚠ CAUTION To prevent damage to components from fumes, store spa chemicals away from pump and spa. If possible, store chemicals in another room.

⚠ Allowing pump to freeze will damage pump and void warranty!

Drain all water from pump and piping when expecting freezing temperatures or when storing pump for a long time (see instructions below).

Keep motor dry and covered during storage.

To avoid condensation/corrosion problems, **do not** cover or wrap pump with plastic.

For outdoor/unprotected pump installations:

1. Enclose entire system in a weatherproof enclosure.
2. To avoid corrosion damage, allow ventilation; **do not** wrap system in plastic.

Follow spa manufacturer's directions for storage of spa.

Draining Pump:

⚠ WARNING Hazardous voltage. Can shock, burn, or cause death. Disconnect power before working on pump or motor.

⚠ To avoid dangerous or fatal electrical shock hazard, turn OFF power to motor before draining pump.

NOTICE: Do not use anti-freeze solutions (except propylene glycol) in your spa system. Most anti-freezes are highly toxic and may damage plastic components in the system. Propylene glycol is non-toxic and will not damage pump components.

1. Close all valves on suction and return piping.
2. Remove drain plug in bottom of front plate.
3. Drain all piping and storage tanks exposed to freezing temperatures.
4. Be sure no airlocks are holding water in system.
5. Consult spa and filter owner's manuals for instructions about draining the rest of the system.

NOTICE: We recommend a drain plug or valve at the low point of the spa piping to help drain spa system.

6. Before restarting, replace all plugs and make sure all pipe connections are tightly sealed.

Startup for Winterized Equipment:

1. Remove any temporary weather protection placed around system for shutdown.
2. Follow filter manufacturer's instructions for reactivation of the filter.
3. Inspect all electrical wiring for damage or deterioration over the shutdown period. Have a qualified serviceman repair/replace wiring as needed. Inspect and tighten all watertight connections.
4. Open all valves in suction and return piping.
5. Remove all winterizing plugs in spa system.
6. Remove all anti-freeze solutions from system.
7. Close all drain valves and replace all drain plugs in spa system.
8. Fill spa with water to proper level (see spa manufacturer's instructions).

TROUBLESHOOTING GUIDE

⚠ WARNING Read and understand safety and operating instructions in this manual before doing any work on pump!

A. PUMP DOES NOT OPERATE

1. Check GFCI for proper operation according to GFCI manufacturer's instructions.
2. Check for plugged impeller. Follow disassembly/assembly instructions under "Pump Service", Page 9.
3. Consult dealer/installer or service representative.

B. IMPROPER JET ACTION

1. Check for blocked fittings. Blocked fittings will cause poor flow and poor jet action.
2. Consult dealer/installer or service representative.

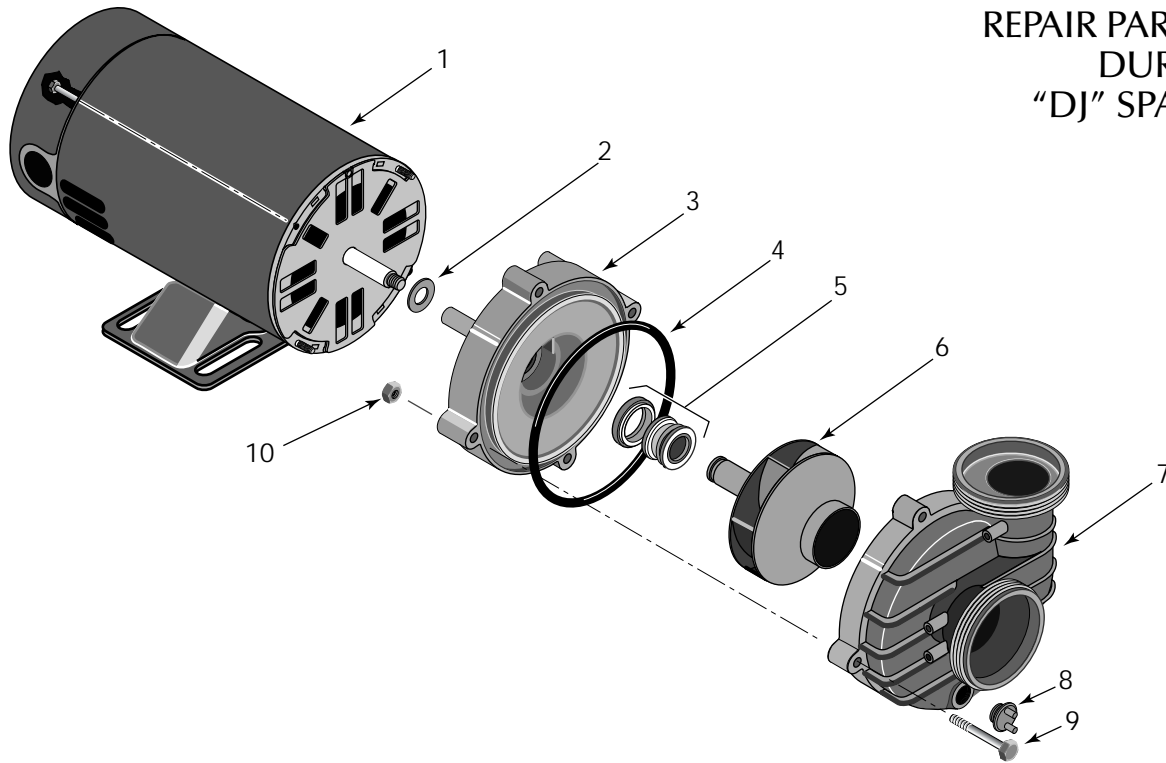
C. EXCESSIVE AIR IN SYSTEM – PUMP LOSES PRIME

1. Make sure water level in spa is at least 2" (51 mm) above top of jets with system not operating.
2. Make sure there are no leaks in suction piping.
3. Make sure there is no vortex (whirlpool) at the suction.
4. Consult dealer/installer or service representative.

D. CIRCUIT BREAKER IN HOME PANEL TRIPS REPEATEDLY

1. Breaker must be of adequate capacity.
2. For GFCI breaker: test according to GFCI manufacturer's instructions.
3. Make sure no other lights and appliances are on circuit.
4. Consult dealer/installer or service representative.

REPAIR PARTS LIST DURA-JET™ "DJ" SPA PUMP



Key No.	Description	Qty.	Part Number
1	Motor	1	Chart Page 13
2	Slinger	1	17351-0009
3	Seal Plate	1	17400-0001
4	O-Ring	1	35505-7430
5	Seal*	1	37400-0028S
6	Impeller	1	Chart Page 13
7	Front Plate/Volute	1	Chart Page 13
8	Drain Plug	1	U178-920P
9	Screw, 1/4-20x1-1/2"	4	30787-0004
10	Nut, Hex 1/4-20, Brass	4	35402-0071
	• Nameplate	1	U33-174
	• Decal, "For use with pools and spas..."	1	U27-635
	• Voltage Label - 230 Volts	1	U27-68
	• Voltage Label - 115 Volts	1	U27-67
	• Voltage Label - 115/230 Volts	1	U27-153
	• Warning Tag	1	C63-12
	• Warning Tag	1	61002-0002
	• Cord Assembly	1	Chart Page 13

For quick disconnect pipe connections, purchase separately Part No. 77703-0105 and Part No. 77703-0108.

Kit Includes:

2 #38405-4094 2" Union Collars
2 #35505-1244 O-Ring
1 #38405-4095 2" Slip Adapter
1 #38405-4096 1-1/2" Slip Adapter (77703-0105 only).

• Not illustrated.

* Models DJAYFA-0062A, -0162A use Seal Part No. 37400-0028.

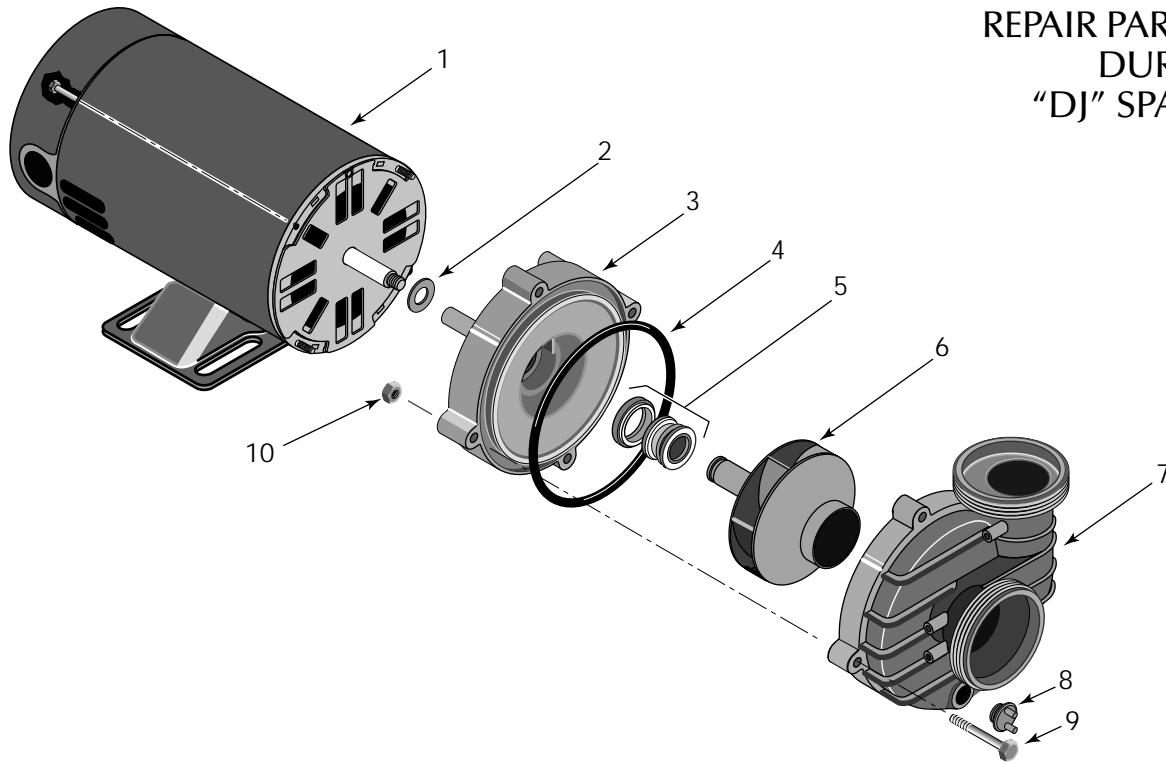
Parts are common to all models listed except as noted;
 Motor (Key No. 1), Impeller (Key No. 6), and Volute (Key No. 7) are listed below.

Model No.	Motor Package (Key No. 1)	Impeller (Key No. 6)	Volute (Key No. 7)	Cord
115 Volt, Single Speed				
DJAEA-0001	62003-2031	17400-0120	17400-0105	-
DJAEA-0007	62003-2059	17400-0120	17400-0105	-
230 Volt, Single Speed				
DJAAGB-0001	62003-2016	17400-0123	17400-0105	-
DJAAGB-0005	62003-2068	17400-0123	17400-0105	-
DJAAGB-0007	62003-2067	17400-0123	17400-0105	-
DJAAGB-0051, -0151	62003-2016	17400-0123	17400-0105	31953-0107
DJAAGB-0091	62003-2016	17400-0123	17400-0105	31953-0119
DJAEB-0001	AS923EL	17400-0120	17400-0105	-
DJAGB-0001	62003-2015	17400-0122	17400-0105	-
DJAGB-0021H, -0121H	62003-2015	17400-0122	17400-0105	31953-0124
DJAGB-0151M	62003-2015	17400-0122	17400-0105	31953-0107
DJAGB-0073, -0173, -3073, -3173	62003-2092	17400-0122	17400-0108	31953-0128
DJAGB-0091, -0191	62003-2015	17400-0122	17400-0105	31953-0119
DJAGB-3173	62003-2092	17400-0122	17400-0108	31953-0128
DJAGB-9051M	62003-2015	17400-0122	17400-0105	31953-0122
DJAGB-9055M, -9155M	62003-2089	17400-0122	17400-0106	31953-0122
DJAGB-9071M	62003-2015	17400-0122	17400-0105	31953-0123
DJAGB-9073, -9173	62003-2092	17400-0122	17400-0108	31953-0128
DJAHB-0007	62003-2067	17400-0135	17400-0105	-
DJAHB-0021H, -0121H**	62003-2079	17400-0135	17400-0108	31953-0124
DJAHB-0041, -0141, -3141	62003-2067	17400-0135	17400-0105	31953-0107
DJAHB-0151	62003-2067	17400-0135	17400-0105	31953-0107
DJAHB-0055M, -0155M	62003-2093	17400-0135	17400-0105	31953-0130
DJAHB-0097	62003-2067	17400-0135	17400-0105	31953-0119
230 Volt / 50HZ Single Speed				
5DJAFB-0001, -0101	62001-1121	17400-0135	17400-0105	-
5DJAEB-0001, -0101	62001-1119	17400-0122	17400-0105	-
5DJAGB-0003, -0103	62001-1123	17400-0136	17400-0105	-
115 / 230 Volt Single Speed				
DJAFB-0001	AS920FLL	17400-0121	17400-0105	-
DJAFB-0002	U27-1249	17400-0121	17400-0105	-
DJAFB-0007	62003-2063	17400-0121	17400-0105	-
DJAFB-0051M, -0151M	U27-1249	17400-0121	17400-0105	31953-0122
DJAFB-0052	U27-1249	17400-0121	17400-0105	31953-0107
DJAFB-0072, -0172	U27-1249	17400-0121	17400-0105	31953-0123
DJAFB-0097	62003-2063	17400-0121	17400-0105	31953-0119
DJAFB-3003D, -3103D	U27-1249	17400-0121	17400-0106	-
115 Volt Two-Speed				
DJAYEA-0001	62001-1101	17400-0120	17400-0105	-
DJAYEA-0002	62003-2010	17400-0120	17400-0105	-
DJAYEA-0007	62003-2060	17400-0120	17400-0105	-
DJAYEA-0052, -0152	62003-2027	17400-0120	17400-0105	31953-0109
DJAYEA-0061	62001-1015	17400-0120	17400-0105	31953-0108
DJAYEA-0062, -0162, -3062*	62003-2027	17400-0120	17400-0105	31953-0108
DJAYEA-0062A, -0162A	62003-2027	17400-0120	17400-0105	31953-0108

* Uses Volute Part No. 17400-0107.

** This model uses a 2-speed motor, but is wired for high-speed only.

REPAIR PARTS LIST DURA-JET™ "DJ" SPA PUMP



Key No.	Description	Qty.	Part Number
1	Motor	1	Chart Page 15
2	Slinger	1	17351-0009
3	Seal Plate	1	17400-0001
4	O-Ring	1	35505-7430
5	Seal*	1	37400-0028S
6	Impeller	1	Chart Page 15
7	Front Plate/Volute	1	Chart Page 15
8	Drain Plug	1	U178-920P
9	Screw, 1/4-20x1-1/2"	4	30787-0004
10	Nut, Hex 1/4-20, Brass	4	35402-0071
•	Nameplate	1	U33-174
•	Decal, "For use with pools and spas..."	1	U27-635
•	Voltage Label - 230 Volts	1	U27-68
•	Voltage Label - 115 Volts	1	U27-67
•	Voltage Label - 115/230 Volts	1	U27-153
•	Warning Tag	1	C63-12
•	Warning Tag	1	61002-0002
•	Cord Assembly	1	Chart Page 15

For quick disconnect pipe connections, purchase separately
Part No. 77703-0105 and
Part No. 77703-0108.

Kit Includes:

2 #38405-4094 2" Union Collars
2 #35505-1244 O-Ring
1 #38405-4095 2" Slip Adapter
1 #38405-4096 1-1/2" Slip Adapter
(77703-0105 only).

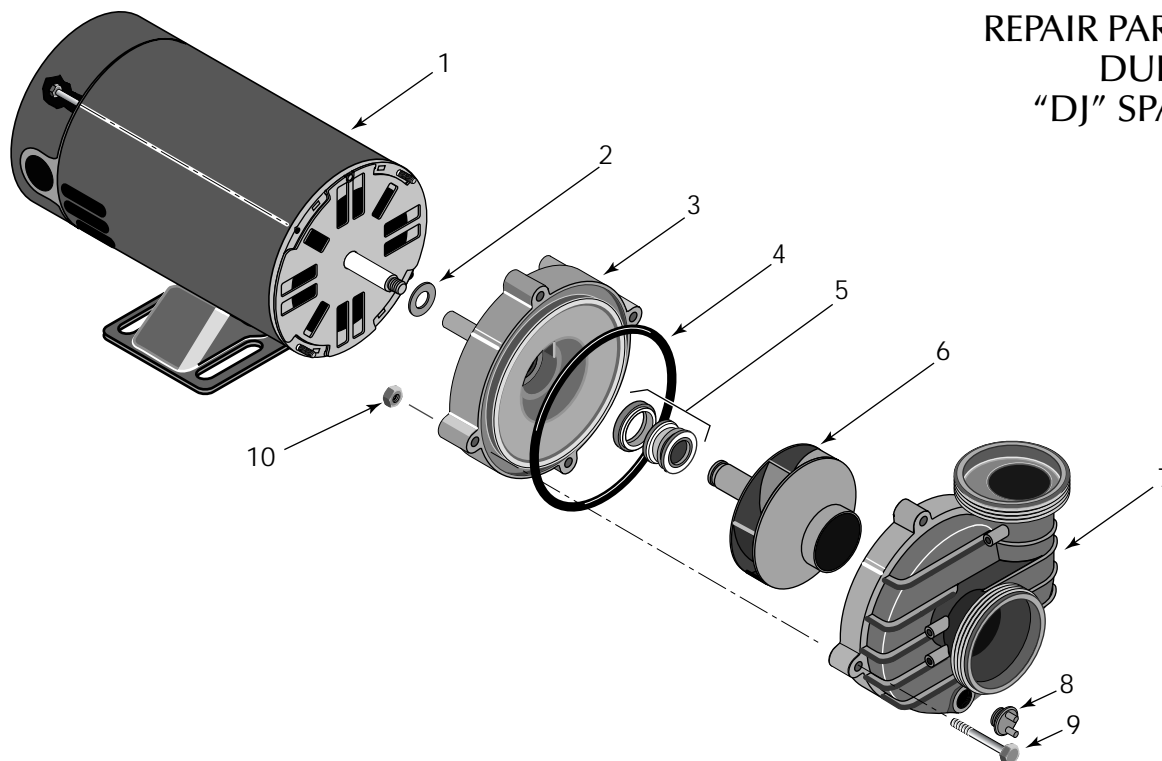
• Not illustrated.

* Models DJAYFA-0062A, -0162A use Seal Part No. 37400-0028.

Parts are common to all models listed except as noted;
 Motor (Key No. 1), Impeller (Key No. 6), and Volute (Key No. 7) are listed below.

Model No.	Motor Package (Key No. 1)	Impeller (Key No. 6)	Volute (Key No. 7)	Cord
115 Volt Two-Speed				
DJAYEA-0082, -0182	62003-2060	17400-0120	17400-0105	31953-0121
DJAYEA-0112	62003-2027	17400-0120	17400-0105	31953-0106
DJAYEA-0142A	62003-2027	17400-0120	17400-0105	31953-0103
DJAYEA-3022	62003-2027	17400-0120	17400-0107	31953-0105
DJAYEA-3052, -3152	62003-2027	17400-0120	17400-0105	31953-0109
DJAYEA-3052M, -3152M -3142B	62003-2027	17400-0120	17400-0105	31953-0103
DJAYEA-3097, -3197	62003-2060	17400-0120	17400-0105	31953-0120
DJAYEA-3013, -3113	62003-2027	17400-0120	17400-0108	31953-0106
DJAYEA-9103	62003-2027	17400-0120	17400-0106	-
DJAYFA-0001	62003-2010	17400-0121	17400-0105	-
DJAYFA-0007	62003-2061	17400-0121	17400-0105	-
DJAYFA-0042B, -0142B	62003-2010	17400-0121	17400-0105	31953-0103
DJAYFA-0151M	62003-2010	17400-0121A	17400-0105	31953-0118
DJAYFA-0052, -0152	62003-2010	17400-0121	17400-0105	31953-0109
DJAYFA-0062, -0162	62003-2010	17400-0121	17400-0105	31953-0108
DJAYFA-3062, -3162	62003-2010	17400-0121	17400-0107	31953-0108
DJAYFA-0062A, -0162A	62003-2010	17400-0121A	17400-0105	31953-0108
DJAYFA-0082, -0182	62003-2061	17400-0121	17400-0105	31953-0126
DJAYFA-3022, -3122	62003-2010	17400-0121	17400-0107	31953-0105
DJAYFA-3022H, 3122H	62003-2010	17400-0121	17400-0108	31953-0125
DJAYFA-3097, -3197	62003-2061	17400-0121	17400-0105	31953-0120
DJAYFA-9022, -9122	62003-2010	17400-0121	17400-0106	31953-0105
230 Volt Two-Speed				
DJAAYGB-0001	62003-2080	17400-0123	17400-0105	-
DJAAYGB-0002	62003-2080	17400-0123	17400-0105	-
DJAAYGB-0003	62003-2025	17400-0123	17400-0105	-
DJAAYGB-0005	62003-2054	17400-0123	17400-0105	-
DJAAYGB-0007	62003-2066	17400-0123	17400-0105	-
DJAAYGB-0051, -0151, -3051, -3151	62003-2025	17400-0123	17400-0105	31953-0109
DJAAYGB-0051M, -0151M	62003-2025	17400-0123	17400-0105	31953-0109
DJAAYGB-0061, -0161	62003-2025	17400-0123	17400-0105	31953-0108
DJAAYGB-0063, -0163	62003-2025	17400-0123	17400-0105	31953-0108
DJAAYGB-3013, -3113	62003-2025	17400-0123	17400-0108	31953-0106
DJAAYGB-3015	62003-2054	17400-0123	17400-0108	31953-0106
DJAAYGB-3021, -3121	62003-2025	17400-0123	17400-0107	31953-0105
DJAAYGB-3053, -3153	62003-2025	17400-0123	17400-0105	31953-0109
DJAAYGB-3061, -3161	62003-2025	17400-0123	17400-0107	31953-0108
DJAAYGB-3092	62003-2080	17400-0123	17400-0105	31953-0120
DJAAYGB-3097	62003-2066	17400-0123	17400-0105	31953-0120
DJAAYGB-9013, -9113	62003-2025	17400-0123	17400-0108	31953-0106
DJAAYGB-9051M	62003-2025	17400-0123	17400-0105	31953-0118
DJAYFB-0001	62003-2026	17400-0121	17400-0105	-
DJAYFB-0002	62003-2018	17400-0121	17400-0105	-
DJAYFB-0013, -0113	62003-2026	17400-0121	17400-0108	31953-0106
DJAYFB-0051M, -0151M	62003-2026	17400-0121	17400-0105	31953-0118
DJAYFB-0061, -0161	62003-2026	17400-0121	17400-0105	31953-0108

REPAIR PARTS LIST DURA-JET™ "DJ" SPA PUMP



Key No.	Description	Qty.	Part Number
1	Motor	1	Chart Page 17
2	Slinger	1	17351-0009
3	Seal Plate	1	17400-0001
4	O-Ring	1	35505-7430
5	Seal*	1	37400-0028S
6	Impeller	1	Chart Page 17
7	Front Plate/Volute	1	Chart Page 17
8	Drain Plug	1	U178-920P
9	Screw, 1/4-20x1-1/2"	4	30787-0004
10	Nut, Hex 1/4-20, Brass	4	35402-0071
•	Nameplate	1	U33-174
•	Decal, "For use with pools and spas..."	1	U27-635
•	Voltage Label - 230 Volts	1	U27-68
•	Voltage Label - 115 Volts	1	U27-67
•	Voltage Label - 115/230 Volts	1	U27-153
•	Warning Tag	1	C63-12
•	Warning Tag	1	61002-0002
•	Cord Assembly	1	Chart Page 17

For quick disconnect pipe connections, purchase separately
Part No. 77703-0105 and
Part No. 77703-0108.

Kit Includes:
2 #38405-4094 2" Union Collars
2 #35505-1244 O-Ring
1 #38405-4095 2" Slip Adapter
1 #38405-4096 1-1/2" Slip Adapter
(77703-0105 only).

• Not illustrated.

* Models DJAYFA-0062A, -0162A use Seal Part No. 37400-0028.

Parts are common to all models listed except as noted;
 Motor (Key No. 1), Impeller (Key No. 6), and Volute (Key No. 7) are listed below.

Model No.	Motor Package (Key No. 1)	Impeller (Key No. 6)	Volute (Key No. 7)	Cord
230 Volt Two-Speed				
DJAYFB-3013, -3113, -9013, -9113	62003-2026	17400-0121	17400-0108	31953-0106
DJAYFB-3093	62003-2026	17400-0121	17400-0105	31953-0120
DJAYFB-9003D, -9103D	62003-2026	17400-0121	17400-0108	-
DJAYGB-0001	62003-2081	17400-0122	17400-0105	-
DJAYGB-0002	62003-2019	17400-0122	17400-0105	-
DJAYGB-0003	62003-2081	17400-0122	17400-0105	-
DJAYGB-0013, -0113, -3013, -3113	62003-2081	17400-0122	17400-0108	31953-0106
DJAYGB-0042B, -0142B	62003-2081	17400-0122	17400-0105	31953-0103
DJAYGB-0051, -0151	62003-2019	17400-0122	17400-0105	31953-0109
DJAYGB-0052, -0152	62001-1139	17400-0122	17400-0108	31953-0109
DJAYGB-0055, -0155	62003-2090	17400-0122	17400-0108	31953-0109
DJAYGB-0055A, -0155A	62003-2090	17400-0122	17400-0108	31953-0109
DJAYGB-0061, -0161	62003-2081	17400-0122	17400-0105	31953-0108
DJAYGB-0073, -0173, -3173, -9173	62003-2081	17400-0122	17400-0108	31953-0131
DJAYGB-3061, -3161	62003-2081	17400-0122	17400-0107	31953-0108
DJAYGB-0112	62003-2081	17400-0122	17400-0105	31953-0106
DJAYGB-0151M	62003-2081	17400-0122	17400-0105	31953-0118
DJAYGB-3021, -3121	62003-2081	17400-0122	17400-0107	31953-0105
DJAYGB-3021H, -3121H	62003-2081	17400-0122	17400-0108	31953-0125
DJAYGB-3051MB, -3151MB	62003-2081	17400-0122	17400-0107	31953-0118
DJAYGB-3055MB, -3155MB	62003-2090	17400-0122	17400-0107	31953-0118
DJAYGB-3071MB, -3171MB	62003-2081	17400-0122	17400-0107	31953-0127
DJAYGB-3092, -3192	62003-2081	17400-0122	17400-0105	31953-0120
DJAYGB-3162	62003-2019	17400-0122	17400-0107	31953-0108
DJAYGB-9013, -9113	62003-2081	17400-0122	17400-0108	31953-0106
DJAYGB-9051M, -9151M,	62003--2081	17400-0122	17400-0105	31953-0118
DJAYGB-9051MB, -9151MB	62003-2081	17400-0122	17400-0107	31953-0118
DJAYHB-0001	62003-2079	17400-0135	17400-0107	-
DJAYHB-0041, -0141	62003-2079	17400-0135	17400-0107	31953-0103
DJAYHB-0051M, -0151M	62003-2079	17400-0135	17400-0105	31953-0118
DJAYHB-0055M, -0155M	62003-2091	17400-0135	17400-0105	31953-0129
DJAYHB-0061, -0161	62003-2079	17400-0135	17400-0107	31953-0108
DJAYHB-0071M	62003-2079	17400-0135	17400-0105	31953-0127
DJAYHB-0097	62003-2079	17400-0135	17400-0105	31953-0120
DJAYHB-3021, -3121	62003-2079	17400-0135	17400-0107	31953-0105
DJAYHB-3021H, -3121H	62003-2079	17400-0135	17400-0108	31953-0125
DJAYHB-9041, -9141	62003-2079	17400-0135	17400-0105	31953-0103
230 Volt / 50HZ Two-Speed				
5DJAYEB-0001, -0101	62001-1119	17400-0122	17400-0105	-
5DJAYFB-0097	62003-2083	17400-0135	17400-0105	31953-0120
5DJAYFB-3007	62003-2083	17400-0135	17400-0105	-
5DJAYFB-3097	62003-2083	17400-0135	17400-0105	31953-0120

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READ, THEN KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

